

ABSTRACT

The difference in optical performance, such as astigmatism, the radius of curvature of a first surface, etc., of left and right lenses is kept at or below a specific level, and the difference in optical performance and the radius of curvature of the first surfaces between new and old lenses when the wearer changes lenses is also kept at or below a specific level, the result being lenses that are more comfortable to wear and are more attractive. When spectacle lens prescription values for a customer are transmitted from an order-side computer to a manufacturer-side computer, a check is made for whether prescription data already exists for that customer, and if it does, the optical performance of the new and old lens designs is compared, and if the difference is within a specific range, the process moves on to the machining step, but otherwise new design data is selected and the optical performance compared, and the above step is repeated until the optical performance difference falls within the specified range. If the optical performance difference or the difference in the radius of curvature of the first surfaces between the left and right lenses is higher than specified, design is repeated until a value within the specific range is attained.